Type-model	Slot x bay	Pro- cessor	GHz	Max turbo (GHz)	Memory <sup>8</sup>	SATA disk	USM portable disk	SATA optical	Graphics		Remote control	AC adapter	Keyboard/ Mouse	Win 7 preload	Avail date (mm/yy)
3109-2XU 3109-3AU 3109-3CU 3109-2SU	5x4 5x4 5x4 5x4	i3-2120 i5-2320 i5-2320 i7-3770	3.30 3.00 3.00 3.40	3.30 3.30 3.90	2GBx3 4GBx3 4GBx4 4GBx4	1TB <sup>2</sup> 1TB 2TB 2TB	None None None None		HD 7450 1G HD 7450 1G GT 620 1G GT 545 1.5G	None None	None None None None	280W 280W 280W 280W	USB USB USB USB	Prem 64 Prem 64 Prem 64 Prem 64	07/12 07/12

- Power Control Switch; color-coded three-speed switch to easily choose between turbo, auto, and cool running modes

- Tool-free chassis design for easy upgrading and maintenance
  Optional Universal Storage Module portable HDD and dock
  Lenovo Rescue System provides OneKey recovery without booting into Windows
  These systems are Microsoft® Office 2010 Product Key Ready (O10PKR)

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Intel® Core™ i3-2120 Processor (2 cores / 4 threads, 3.30 GHz, 3M Cache), integrated Intel HD Graphics 2000, DDR3 memory controller (up to 1333MHz) Intel Core i5-2320 Processor (4 cores / 4 threads, 3.00 GHz, 6M Cache), Turbo Boost Technology 2.0 (up to 3.30 GHz), integrated Intel HD Graphics 2000, DDR3 memory controller (up to 1333MHz) Intel Core i7-3770 Processor (4 cores / 8 threads, 3.40 GHz, 8M Cache), Turbo Boost Technology 2.0 (up to 3.90 GHz), integrated Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz) Processor in LGA1155 socket	
32GB max <sup>8</sup> , dual-channel capable, <b>PC3-12800 1600MHz DDR3</b> , non-parity, four 240-pin DIMM sockets  * System automatically clocks down for processors with 1333MHz memory controller	
<ul> <li>Some: NVIDIA® GeForce® GT 620, PCI Express® x16, 1GB memory, DirectX® 11, one VGA connector, one HDMI connector, HDCP-compliant</li> <li>Some: NVIDIA GeForce GT 545, PCI Express x16, 1.5GB memory, DirectX 11, one VGA connector, one DVI-I connector, one HDMI connector, HDCP-compliant</li> <li>Some: AMD Radeon™ HD 7450, PCI Express x16, 1GB memory, DirectX 11, occupy two slots, one VGA connector, one HDMI connector, HDCP-compliant</li> </ul>	
1TB or 2TB, SATA 6.0Gb/s, 7200 rpm None None Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0 support Some: Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive Some: Blu-ray™ burner, Blu-ray and DVD disk recordable Two SATA cables (each 1-drop to device), two SATA 3.0Gb/s connectors, two SATA 6.0Gb/s connectors, and one eSATA (occupied on USM portable HDD models 9-in-1 media reader (MS, MS Pro, SD, SDHC, SDXC, MMC, CF I/CF II, MD)	)
Intel Z75 Express Chipset	1
Two USB 3.0, microphone (3.5mm), headphone (3.5mm) Four USB 2.0, ethernet (RJ-45), monitor (VGA, HDMI, DVI-I on selected models) * Onboard VGA and HDMI connectors are disabled on discrete models Line-in (3.5mm), line-out [Front out L/R] (3.5mm), microphone-in (3.5mm), Cen/LFE (3.5mm), Surround out L/R (3.5mm), S/PDIF out High Definition (HD) audio, ALC892 codec None None Gigabit ethernet on planar, Realtek RTL8111E None	
None None	
Full-size keyboard (USB connector), Fn keys, black Optical Wheel Mouse (USB connector), black 280 watts, universal, manual switch	
Metal Gray (metal brush effect)  6.89" W X 16.10" D X 14.17" H; 175mm W X 409mm D X 360mm H From 24.6 lb (11.2 kg), weight may vary by configuration Toolless cover removal Toolless disk, optical drive removal Bay ① 5.25", 1.6" high, access, standard optical Bay ② 5.25", 1.6" high, access, open Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk Bay ⑥ 3.5", 1" high, access, optional USM portable disk Slot 1: half-length, full-height, PCI Express x16 Ver 3.0 * Slot 2: half-length, full-height, PCI Express x1 Ver 2.0 ** Slot 4: half-length, full-height, PCI Express x1 Ver 2.0 ** Slot 4: half-length, full-height, PCI Express x1 Ver 2.0 ** * Graphics adapter in slot on some models, some graphics adapters occupy two slots	4
	integrated Intel HD Graphics 2000, DDR3 memory controller (up to 1333MHz) Intel Core i5-2320 Processor (4 tores / 4 threads, 3.00 GHz, 6M Cache), Turbo Boost Technology 2.0 (up to 3.30 GHz), integrated Intel HD Graphics 2000, DDR3 memory controller (up to 1600MHz) Intel Core i7-3770 Processor (4 cores / 8 threads, 3.40 GHz, 8M Cache), Turbo Boost Technology 2.0 (up to 3.90 GHz), integrated Intel HD Graphics 4000, DDR3 memory controller (up to 1600MHz) Processor in LGA1155 socket  32GB max <sup>3</sup> , dual-channel capable, PC3-12800 1600MHz DDR3, non-parity, four 240-pin DIMM sockets  *System automatically clocks down for processors with 1333MHz memory controller Some: NVIDIA* GeForce* GT 620, PCI Express* x16, 1GB memory, DirectX** 11, one VGA connector, one HDMI connector, HDCP-compliant Some: NVIDIA* GeForce* GT 620, PCI Express x16, 15GB memory, DirectX** 11, one VGA connector, one DVI-1 connector, one HDMI connector, HDCP-compliant Some: AMD Radeon** HD 7450, PCI Express x16, 16B memory, DirectX** 11, occupy two slots, one VGA connector, one HDMI connector, HDCP-compliant 1TB or 2TB, SATA 6.0Gb/s, r200 rpm None None None None Serial ATA, SATA 6.0Gb/s, integrated in chipset, RAID 0 support Some: Bilu-ray** burner, Bilu-ray and DVD disk recordable Two SATA cables (each 1-drop to device), two SATA 3.0Gb/s connectors, two SATA 6.0Gb/s connectors, and one eSATA (occupied on USM portable HDD models 9-in-1 media reader (MS, MS Pro, SD, SDHC, SDXC, MMC, CF I/CF II, MD)  Intel Z75 Express Chipset Two USB 3.0, microphone (3.5mm), headphone (3.5mm) Four USB 2.0, ethernet (RJ-45), monitor (VGA, HDMI, DVI-1 on selected models)  * Onboard VGA and HDMI connectors are disabled on discrete models Line-in (3.5mm), line-out [Front out L/R] (3.5mm), microphone-in (3.5mm), Cen/LFE (3.5mm), Surround out L/R (3.5mm), microphone-in (3.5mm), Cen/LFE (3.5mm), surround out L/R (3.5mm), microphone-in (3.5mm), Full-size keyboard (USB connector), Fn keys, black Optical Wheel Mouse (USB connector), black 800 wats, universal, manual switch  * Met

## Preloaded operating system<sup>20</sup> - Genuine Windows® 7

## Preloaded applications<sup>5</sup> (only some listed)

## Lenovo® OneKey Recovery

- Driver and Application Installation
- McAfee® AntiVirus Plus (60 days of virus definitions)

  • Adobe® Flash® Player

  • Power Control Switch

Home Premium 64

- CyberLink Power2Go
- (DVD±RW, BD burner) Cyberlink PowerDVD (BD burner)
- Microsoft Office 2010 preloaded; purchase product key to activate
   Windows Live Essentials



## Limited Warranty<sup>1</sup>

- 1-year parts and labor
- Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts<sup>3</sup>, 8 am - 5 pm)
- Service upgrade options (in eligible locations):9
  - 2-year Lenovo Onsite Repair 9x5 Next Business Day (78Y1552) 3-year Lenovo Onsite Repair
  - 9x5 Next Business Day (78Y1553) 24x7<sup>14</sup> toll-free support for warranty
- issues during the warranty period1 via 877-453-6686